# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| JACKSON PURCHASE ELECTRIC COOPERATIVE CORPORATION, INC. | )                 |
|---------------------------------------------------------|-------------------|
| ·                                                       | ) CASE NO. 93-044 |
| ALLEGED FAILURE TO COMPLY WITH COMMISSION REGULATIONS   | <u> </u>          |

#### ORDER

Jackson Purchase Electric Cooperative Corporation, Inc. ("Jackson Purchase"), a Kentucky corporation which engages in the distribution of electricity to the public for compensation for lights, heat, power, and other uses, and which was formed under KRS 279.010 to 279.220, is a utility subject to Commission jurisdiction. KRS 278.010; KRS 279.210.

KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by utilities. Pursuant to this statutory directive, the Commission promulgated Commission Regulation 807 KAR 5:041, Section 3, which requires electric utilities to maintain their plant and facilities in accordance with the standards of the National Electrical Safety Code (1990 Edition). It also promulgated Commission Regulation 807 KAR 5:006, Section 22, which requires a utility to adopt and execute a safety program.

Commission Staff has submitted to the Commission an Electrical Utility Accident Investigation Report dated November 12, 1992, appended hereto, which alleges:

- 1. On October 28, 1992, James Fox, an employee of T.L. Riley Construction Company, was seriously injured while working on the primary connection between a primary electric line and a transformer. Fox suffered burns to his head and hands when he came into contact with a 7200 volt energized jumper. At the time of the incident, Fox was not wearing rubber gloves.
- 2. At the time of the incident, Jackson Purchase had contracted with T.L. Riley Construction Company to construct and install certain utility plant.
- 3. Jackson Purchase's safety rules require the use of rubber gloves when working near energized equipment.
- 4. Fox's failure to wear rubber gloves while working near energized equipment is a violation of National Electrical Safety Code Section 44 (441A) which prohibits persons from approaching energized equipment unless, <u>inter alia</u>, they are insulated from energized parts or the equipment is de-energized.
- 5. At the time of the incident, Fox and T.L. Riley Construction Company were acting as agents of Jackson Purchase.
- 6. As a result of Fox's failure, Jackson Purchase is in probable violation of Commission Regulation 807 KAR 5:006, Section 22, and 807 KAR 5:041, Section 3(1).
- 7. At the time of the incident, the communications conductor attached to the utility pole involved in the incident failed to comply with the minimum vertical clearance standards for aboveground wires and conductors set forth in National Electrical Safety Code Section 232B1.

- 8. Jackson Purchase owns and maintains the utility poles to which this communications conductor was attached.
- 9. By allowing a conductor which did not comply with the provisions of the National Electrical Safety Code to remain attached to its utility poles, Jackson Purchase failed to operate and maintain those utility poles in accordance with the provisions of the National Electrical Safety Code and is in probable violation of Commission Regulation 807 KAR 5:041, Section 3(1).

The Commission, on its own motion, HEREBY ORDERS that:

- 1. Jackson Purchase shall submit to the Commission within 20 days of the date of this Order a written response to the allegations contained in the Electrical Utility Accident Investigation Report.
- 2. Jackson Purchase shall appear on April 1, 1993, at 1:00 p.m., Eastern Standard Time, in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purpose of presenting evidence concerning the incident which is the subject of the Electrical Utility Accident Investigation Report, specifically the alleged violations of Commission Regulations 807 KAR 5:006, Section 22, and 807 KAR 5:041, Section 3, and of showing cause, if any it can, why it should not be subjected to the penalties of KRS 278.990 for its alleged failure to comply with Commission Regulations.
- 3. Any motion for a conference with Commission Staff to discuss the issues presented by the Electrical Utility Accident Investigation Report shall be made at the time Jackson Purchase submits its response.

4. The Electrical Utility Accident Investigation Report dated November 12, 1992 is hereby made a part of the record of this case.

Done at Frankfort, Kentucky, this 9th day of February, 1993.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director

#### APPENDIX

## APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 93-044 DATED 2/9/93

### ELECTRICAL UTILITY ACCIDENT INVESTIGATION

| DATE OF THIS REPORT 11/12/92 SUBNITTED BY Elie El-Rouaiheb        |  |  |
|-------------------------------------------------------------------|--|--|
| NAME OF UTILITY Jackson Purchase Electric Cooperative             |  |  |
| Corporation ("Jackson Purchase")                                  |  |  |
| ACCIDENT REPORTED BY Mr. Joe McDougal                             |  |  |
| DATE & TIME ACCIDENT OCCURRED 10/28/92 at 10:30 a.m.              |  |  |
| DATE & TIME UTILITY LEARNED OF ACCIDENT 10/28/92 - at 10:33 a.m.  |  |  |
| DATE & TIME ACCIDENT REPORTED 10/28/92 at 12:03 p.m.              |  |  |
| DATE OF ACCIDENT INVESTIGATION 10/29/92                           |  |  |
| DATE SUMMARY WRITTEN REPORT WAS RECEIVED FROM UTILITY 10/30/92    |  |  |
| PERSONS ASSISTING IN THE INVESTIGATION Mr. Donald R. Schaefer of  |  |  |
| Jackson Purchase, David Denlip and Graig Vied of T. L. Riley      |  |  |
| Construction Company                                              |  |  |
| NAME OF VICTIM James Fox SEX M AGE 36                             |  |  |
| FATAL NO NAME OF EMPLOYER T. L. Riley                             |  |  |
| Construction Company                                              |  |  |
| INJURIES Mr. Fox received burns to his head and fingers           |  |  |
| LOCATION OF ACCIDENT SITE Vaughn's Chapel Road in Marshall        |  |  |
| County, Kentucky                                                  |  |  |
| DESCRIPTION OF ACCIDENT A new in-line pole was set by a crew      |  |  |
| who works for the contractor, T. L. Riley Construction Company    |  |  |
| ("Contractor"). A transformer was mounted on the new pole to      |  |  |
| serve a new customer. Mr. James Fox was working on the primary    |  |  |
| connection between the single phase primary electric line and the |  |  |
| transformer when he came in contact with the 7200V energized      |  |  |
| jumper. Mr. Fox was working from the bucket truck and wasn't      |  |  |
| wearing rubber gloves or a hard hat. Mr. Fox is a foreman and     |  |  |
| an employee of the contractor.  Page 1 of 3                       |  |  |
| rage 1 Of 3                                                       |  |  |

SOURCE OF INFORMATION Donald R. Schaefer of Jackson Purchase Jackson Purchase's report, David Denlip and Graig Vied of T. L. Riley Construction Company and an onsite investigation. PROBABLE VIOLATIONS OF COMMISSION REGULATIONS There were two probable violations of Commission Regulations involved in this accident: 1. Mr. James Fox was not wearing rubber gloves while working on energized circuits, resulting in a probable violation of 807 KAR 5:006, Section 24, Jackson Purchase's Safety Manual Section 5 (504(c)); and 807 KAR 5:041, Section 3(1), Acceptable Standards 1990 NESC, Section 44(441a(1)). 2. The clearance between the cable TV line and ground is 11'-8 1/2", resulting in a probable violation of 807 KAR 5:041, Section 3(1) Acceptable Standards 1990 NESC, Section 23(232 B(1)). NESC requires a clearance of 15'-6". RECOMMENDATIONS Due to Jackson Purchase's probable violation of 807 KAR 5:006, Section 24 and 807 KAR 5:041, Section 3, it is recommended that the Commission consider action in accordance with KRS 278.990. As to the low clearance, it is recommended that Jackson Purchase take corrective action immediately to correct the low clearance found beyond the accident site. It is further recommended that Jackson Purchase furnish documentation of work done to this Commission as soon as work is completed. CORRECTIVE ACTIONS Corrective action has been recommended.

## ELECTRICAL UTILITY ACCIDENT INVESTIGATION (Continued) LINE CLEARANCES

|                                                       |                                         | As Measured   | Minimum Allowed<br>by NESC |
|-------------------------------------------------------|-----------------------------------------|---------------|----------------------------|
| Α.                                                    | AT POINT OF ACCIDENT                    |               |                            |
|                                                       | Phase conductor to ground elevation:    | 34'-1/2"      | 18'-6"                     |
|                                                       | Neutral conductor to ground elevation:  | 29'-11"       | 15'-6"                     |
|                                                       | Cable TV conductor to ground elevation: | 18'-7"        | 14'-0"                     |
| В.                                                    | AT LOWEST POINT OF SPAN                 |               |                            |
|                                                       | Phase conductor to ground elevation:    | 25'-10"       | 18'-6"                     |
|                                                       | Neutral conductor to ground elevation:  | 21'-3 1/2     | 15'-6"                     |
|                                                       | Cable TV conductor to ground elevation: | 11'-8 1/2     | " 15'-6"                   |
| c.                                                    | SPAN LENGTH: 329'                       |               |                            |
| Date                                                  | the line or facilities were co          | onstructed    | January 1951               |
| Volta                                                 | age of line or facilities               | 7200V         |                            |
| Date                                                  | last inspected by utility               | January 1992  |                            |
| Util.                                                 | ity Jackson Purchase                    |               |                            |
| Date                                                  | 10/29/92 Time                           | 12:15 p.m.    |                            |
| Appr                                                  | oximate temperature60                   | degrees F     |                            |
| Measurements made by David Calhoun and Dennis Johnson |                                         |               |                            |
|                                                       | Submitted                               | by: Elio F1-1 | Rouaihel-                  |

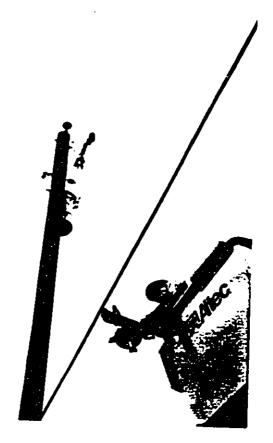


### P.S.C. EHERGENCY REPORT FORM

OCT BO THE

| DATE 10-28-92                                             | TIME 10:45 UNHOON OF WHILETY                 |  |  |
|-----------------------------------------------------------|----------------------------------------------|--|--|
| COMPANY Jackson Purchase Electric Cooperative Corporation |                                              |  |  |
| PERSON HAKING CALL: NAME                                  | Donald R. Schaefer                           |  |  |
| TITLE                                                     | Manager of Engineering                       |  |  |
| ADDRESS                                                   | 2900 Irvin Cobb Drive P O Box 3188           |  |  |
| PHONE                                                     | (502) 442-7321                               |  |  |
| LOCATION OF OCCURRENCE Account No.                        | 42-89-68                                     |  |  |
| Vaughn's Chapel Road in Marshall County                   | , outside of the town of Possum Trot.        |  |  |
|                                                           |                                              |  |  |
| TIME OF OCCURRENCE 10:30 A.M.                             |                                              |  |  |
|                                                           | IS: YES NO                                   |  |  |
| INJURI                                                    | ES: YES X NO                                 |  |  |
| ESTIHA                                                    | TED COST OF DAMAGE                           |  |  |
| CAUSE & DESCRIPTION Crew was setting                      | ng a new in-line pole, a transformer was     |  |  |
|                                                           | g up grounds and contacted energized jumper. |  |  |
| Injured: James Fox, T.L. Riley Construct                  | tion Co.                                     |  |  |
| EFFECTS ON NORMAL SERVICE None                            |                                              |  |  |
|                                                           |                                              |  |  |
| ~ = ~ = ~ = ~ = ~ = ~ = ~ = ~ = ~ = ~ =                   |                                              |  |  |
| CORRECTIVE ACTIONS TAKEN Investig                         | gation of Accident                           |  |  |
|                                                           |                                              |  |  |
| TIME OF RESUMPTION OF NORMAL SERVICE                      |                                              |  |  |
| SIGNI                                                     | ED Consid R. Solute                          |  |  |
| דודו                                                      | LE Manager of Engineering                    |  |  |
| DA:                                                       | re <u>10-28-92</u>                           |  |  |





### APPENDIX A

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 93-043 DATED 2/9/93

### ELECTRICAL UTILITY ACCIDENT INVESTIGATION

| DATE OF THIS REPORT 12/2/92 SUBMITTED BY John W. Land           |
|-----------------------------------------------------------------|
| NAME OF UTILITY Jackson County RECC                             |
| ACCIDENT REPORTED BY Lee Dunsill                                |
| DATE AND TIME ACCIDENT OCCURRED 10/7/92 - 10:30 a.m.            |
| DATE & TIME UTILITY LEARNED OF ACCIDENT 10/7/92 - 10:45 a.m.    |
| DATE & TIME ACCIDENT REPORTED 10/7/92 - 10:55 a.m.              |
| DATE OF ACCIDENT INVESTIGATION 10/8/92                          |
| DATE SUMMARY WRITTEN REPORT WAS RECEIVED FROM UTILITY 10/12/92  |
| PERSONS ASSISTING IN THE INVESTIGATION Troy Richardson, First   |
| Class Lineman (foreman) of Dobson Power Line Construction Co.,  |
| Inc.; Gary D. Farmer, Safety Coordinator and Coleman Bingham,   |
| Maintenance Superintendent employees of Jackson County RECC     |
| NAME OF VICTIM 1. Terry Parrett SEX M AGE 24                    |
| FATAL NO NAME OF EMPLOYER: Dobson Power Line                    |
| Construction Co., Inc.                                          |
| INJURIES Burns to right hand and left side                      |
| LOCATION OF ACCIDENT SITE At Quail, Kentucky in Rockcastle      |
| County, just off Highway 70, 10 miles out of Mt. Vernon,        |
| Kentucky. System Map #212-34-4318                               |
| DESCRIPTION OF ACCIDENT Mr. Troy Richardson is a foreman for    |
| Dobson Power Line Construction Co., Inc. and was at the work    |
| site when the accident occurred. Mr. Richardson stated that Mr. |
| Terry Parrett (victim) was on a pole working on a transformer   |

<u>installation just below Mr. Lee Isaccs, who was in the bucket</u> tying in a single phase line on the same pole structure. Mr. Richardson said that Mr. Isaacs called to Mr. Parrett to watch out because he had to cut some excess wire from the line he was working on and did not want the wire to hit Mr. Parrett if it fell. The excess wire fell and caught on a single phase 7200 volt line which they believed to be deenergized. \_The wire caught on the single phase 7200 volt line which was near Mr. Parrett's position on the pole and contacted Mr. Parrett causing third degree burns to Mr. Parrett's right hand and left side. Mr. Richardson said that they had deenergized what they believed to be the only feed into this pole structure and had visualy checked the single phase line which was involved in this accident. SOURCE OF INFORMATION Troy Richardson, foreman for Dobson Power\_ Line Construction Co., Inc.; Gary D. Farmer, safety coordinator and Coleman Bingham, maintenance superintendent. Both are employees of Jackson County RECC plus Jackson County RECC's Accident Report, Dobson Power Line Construction Company, Inc. 's Accident Report and an on-site field investigation. PROBABLE VIOLATIONS OF COMMISSION REGULATIONS There are three probable violations concerning this accident: Commission Regulation 807 KAR 5:041, (Electric). Section 3 (2), requires that each electric utility construct and maintain its plant in

accordance with the National Electric Safety Code ("NESC"), ANSI C-2, 1990 Edition. 1. The NESC Section 42, Subparagraph 420 D., Energized or Unknown Condition, requires that employees shall consider electric supply equipment and lines to be energized unless they are positively known to be deenergized. 2. Subparagraph 420 H., Tools and Protective Equipment, requires that employees shall use the personal protective equipment, the protective devices, and the special tools provided for their work. Before starting work, these devices and tools shall be carefully inspected to make sure they are in good condition. 3. Subparagraph 421 A., Duties of a First Level Supervisor or person in charge, states that this individual shall: 1. adopt such precautions as are within the individual's authority to prevent accidents. 2. See that the safety rules and operating procedures are observed by the employees under the direction of this individual. Commission Regulation 807 KAR 5:006 (General Rules), Section 24, requires that each electric utility shall adopt and execute a safety program. Jackson County RECC and Dobson Power Line Construction Co., Inc. both use the America Public Power Association Safety Manual. There is also a probable violation of Section 5, Safety Rule 507 Working on-Deenergized Lines and Equipment and Safety Rule 516 Grounding-

General. In reference to the 1990 NESC rules and the American Public Power Association Safety Manual rules of Jackson County RECC and Dobson Power Line Construction Co., Inc. the above mentioned rules were not complied with. Mr. Troy Richardson, a\_ foreman for Dobson Power Line Construction Co., Inc. stated that he only visually checked the line that was energized and that system grounds were not being used at the work site. Mr. Richardson said that he did not know that this pole\_structure had a double feed into it and that he believed he had deengergized the only feed into this pole structure where the accident occurred. RECOMMENDATIONS It is recommended that the Public Service Commission consider action against Jackson County RECC in accordance with KRS 278.990, due to the probable violations by the contractor employed by Jackson County RECC of Commission Regulation 807 KAR 5:041, (Electric) Section 3(2), 1990 NESC Section 42. Subparagraph 420 D., Energized or Unknown Conditions and Subparagraph 420 H., Tools and Protective Equipment and Subparagraph 421 A., Duties of a First Level Supervisor or person in charge and Commission Regulation 807 KAR 5:006, Section 24, Jackson County RECC Safety Manual, Section 5, Subparagraph 507 a) Working on Deenergized Lines and Equipment and Safety Rule 526 a) b) d) f) Grounding-General. CORRECTIVE ACTION None taken at this time.

# ELECTRICAL UTILITY ACCIDENT INVESTIGATION (Continued) LINE CLEARANCES

| <del>-</del>                                                                             | As Measured  | Minimum Allowed<br>by NESC<br>1990 Edition |
|------------------------------------------------------------------------------------------|--------------|--------------------------------------------|
| A. AT POINT OF ACCIDENT                                                                  |              |                                            |
| Phase conductors to ground elevation:                                                    |              |                                            |
| New single phase conductor to ground elevation:                                          | 33' - 6"     | 18.5'                                      |
| New neutral conductor to ground elevation:                                               | 29' - 4"     | 15.5'                                      |
| CATV cable to ground elevation:                                                          | 16' - 6 1/2" | 15.5'                                      |
| Old 6A phase conductor to ground elevation (energized):                                  | 24' - 5"     | 18.5'                                      |
| Old 8A neutral conductor to ground elevation:                                            | 20' - 7 1/2" | 15.5'                                      |
| New single phase conductor to ground elevation (Tail of this wire involved in accident): | 33' - 7"     | 18.5'                                      |
| New neutral conductor to ground elevation:                                               | 28' - 11"    | 15.51                                      |
| Old 4T secondary service to ground elevation:                                            | 26' - 2"     | 16.0'                                      |
| B. AT LOWEST POINT OF SPAN                                                               |              | - <del></del>                              |
| Phase conductor to ground elevation:                                                     | N/A          | N/A                                        |
| Neutral conductor to ground elevation                                                    | N/A          | N/A                                        |
| Communication conductor to ground elevation:                                             | N/A          | N/A                                        |

| C SPAN LENGTH N/A                                           |                           |  |
|-------------------------------------------------------------|---------------------------|--|
| Date the line or facilities were                            | constructed: July 1, 1964 |  |
| Voltage of line or facilities:                              | 7200 volt phase to ground |  |
| Date last inspected by utility:                             | October 1990              |  |
| Utility: Jackson County RECC                                |                           |  |
| Date: 10/7/92                                               | Time: 2:30 p.m.           |  |
| Approximate temperature: 60 degrees F.                      |                           |  |
| Measurements made by: Mr. Coleman Bingham, maintenance      |                           |  |
| superintendent for Jackson Co. RECC and John W. Land of PSC |                           |  |
| Engineering Staff                                           |                           |  |
|                                                             |                           |  |